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Technology Deployment

IDAHO NATIONAL ENGINEERING AND ENVIRONMENTAL LABORATORY

INEEL

HOME OF SCIENCE AND ENGINEERING SOLUTIONS

Light Duty Utility Arm

Problem
INEEL's High-Level Waste Pretreatment project needed access to the interior of underground storage tanks to gather information on the contents of tanks at the Idaho Nuclear Technology and Engineering Center.

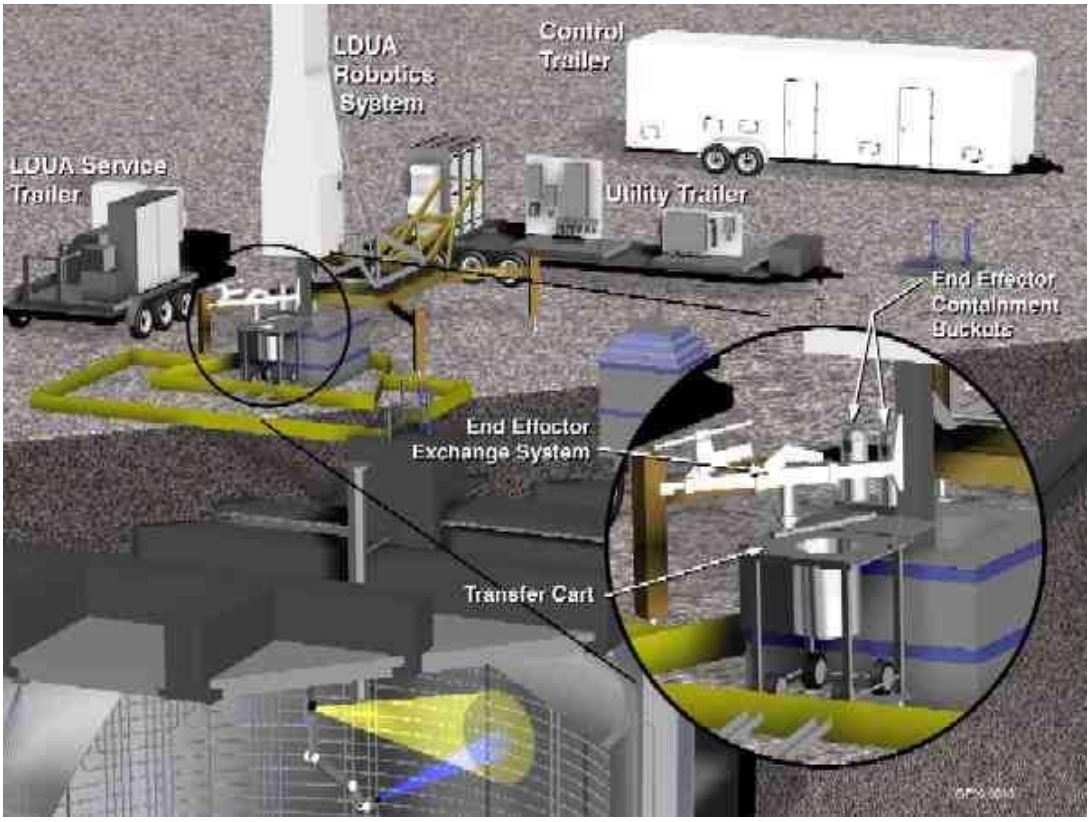
Baseline Technology
Manually operated approaches.

Innovative Technology
The Light Duty Utility Arm is a remote-operated robot arm that positions exchangeable tools (end effectors) at almost any point within an underground tank.

Comparison
Manual approaches may expose workers to radioactive and hazardous materials, and do not allow full access to tank interiors.

Benefits
This robotic arm enabled the project to obtain information required to design new treatment systems and model the future transfer of sodium-bearing wastes from the tanks to the treatment.

Project: ID-HLW-101
High Level Waste Pretreatment
OST #85



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